PATENT
Attorney Docket No. A-65353-7/RFT/RMS/RMK

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

MAYO, *et al.*

Serial No. 09/827,960

Filed: April 4, 2001

For: *Apparatus and Method for Automated Protein Design*

Group No. 1637

Examiner: Kim, Young J.

RESPONSE TO OFFICE ACTION

RECEIVED

DEC 0 4 2002

TECH CENTER 1600/2900

Box Non Fee Amendment
Commissioner for Patents
Washington, DC 20231

Sir:

This paper is being submitted in response to the Office Action mailed September 27, 2002. This response is filed on or before the due date of December 27, 2002, making this a timely response. The Commissioner is authorized to charge any additional fees, including any extension fees, which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order 468268-13/A65353-7/RFT/RMS/RMK).

In the Claims:

Please cancel Claims 2-29 without prejudice or disclaimer.

Claims 30-35 remain pending in this application.

Please amend the claims as follows.

30. (Once Amended) A computer readable memory that upon execution by a computer processor carries out the following functions:

a) alters at least one supersecondary structure parameter value of a protein backbone structure;

b) correlates a group of potential rotamers for residue positions of said protein backbone structure; and

c) analyzes the interaction of each of said rotamers with all or part of the remainder of said protein backbone structure to generate a set of optimized protein sequences.

1098299_1